

U. S. Department of Energy

Nuclear Energy University Programs



Introduction

The U.S. Department of Energy's Office of Nuclear Energy created Nuclear Energy University Programs (NEUP) in 2008 to consolidate its university support under one initiative.

NEUP funds research and equipment upgrades at U.S. colleges and universities, and provides scholarships and fellowships to students studying nuclear-related fields.

NEUP plays a key role in helping the Department of Energy accomplish its mission of leading the nation's

investment in the development and exploration of advanced nuclear science and technology.

As stated in its Nuclear Energy Roadmap, the Department promotes nuclear energy as a resource capable of meeting the nation's energy, environmental, and national security needs by resolving technical, cost, safety, security, and proliferation resistance through research, development, and demonstration, as appropriate.



www.ne-up.org



NEUP's Objectives

NEUP's objectives are to support outstanding, cutting-edge and innovative research at U.S. universities by:

- Administering NEUP R&D awards to support the Department of Energy's goal of integrating R&D at universities, national laboratories, and industry to revitalize nuclear education and support the Office of Nuclear Energy's programs
- Attracting the brightest students to the nuclear professions and supporting the nation's intellectual capital in nuclear engineering and relevant nuclear science, such as health physics, nuclear materials science, radiochemistry, and applied nuclear physics
- Improving relevant university and college infrastructures for conducting R&D and educating students
- Supporting the Department of Energy's goal of facilitating the transfer of knowledge from an aging nuclear workforce to the next generation of workers.





Dr. Akira Tokuhiro
University of Idaho
R&D recipient

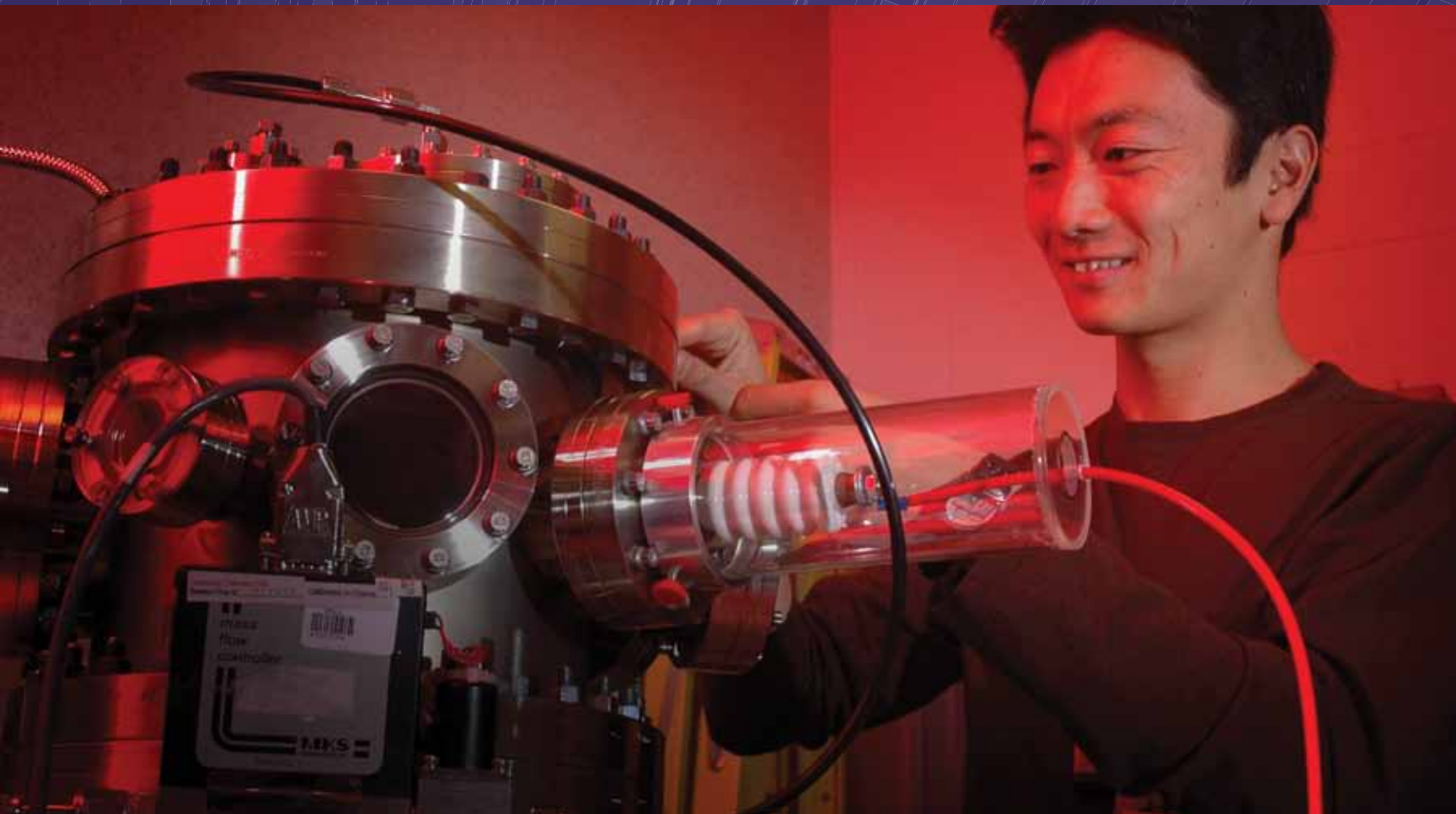
NEUP seeks to align the nuclear energy research being conducted at U.S. colleges and universities with the Department of Energy's mission and goals.

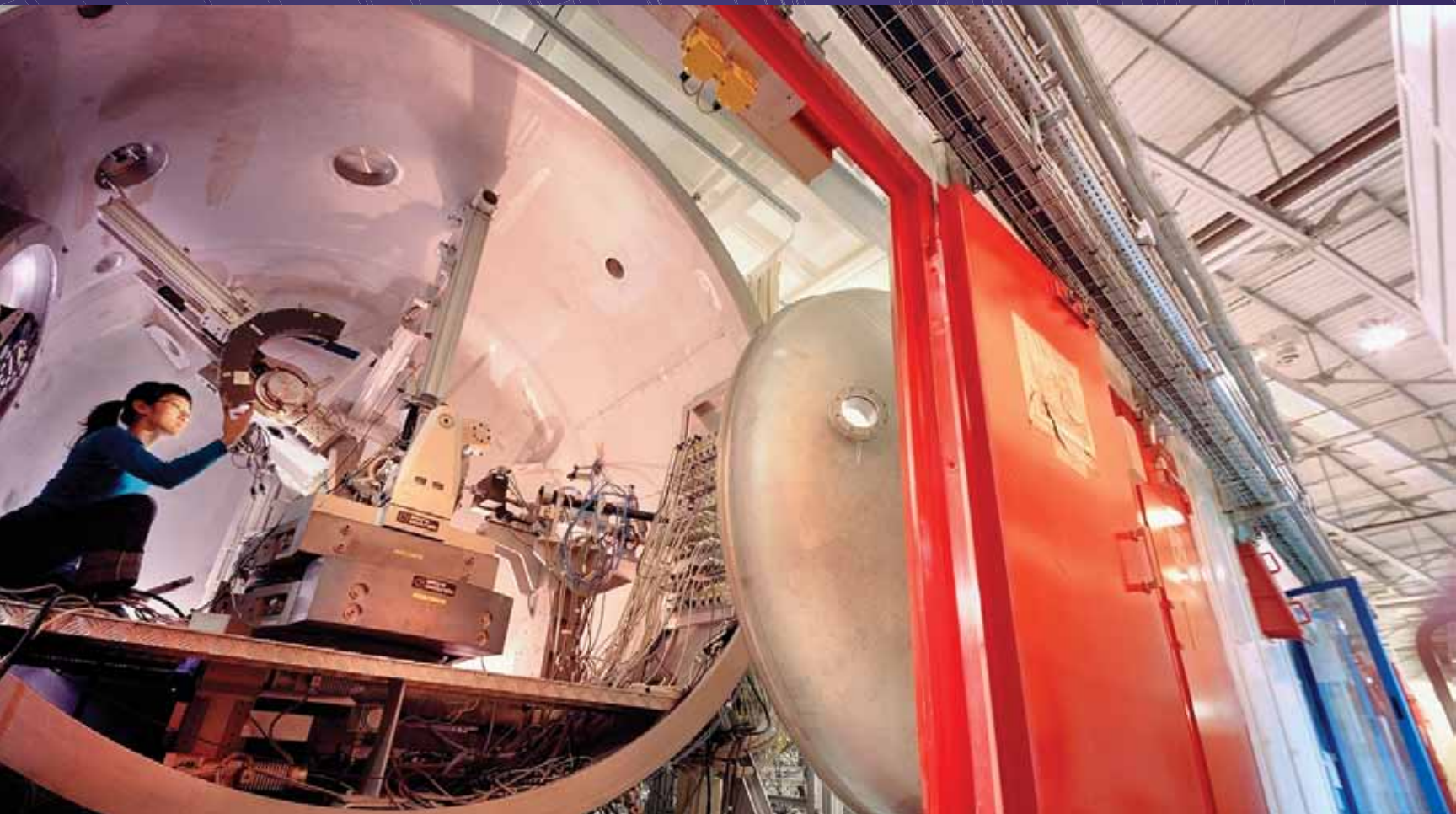
The program is supporting projects that focus on needs and priorities of key Office of Nuclear Energy programs, including fuel cycle, reactor concepts, and transformative R&D. Projects are also sought that address mission supporting "blue sky" topics.

All proposals are subjected to a rigorous, independent peer review process to eliminate bias and ensure the projects that are funded are based on technical merit and relevance to the Department's mission.

Since FY 2009, NEUP has funded more than \$80 million in research projects at dozens of U.S. colleges and universities.

Research & Development



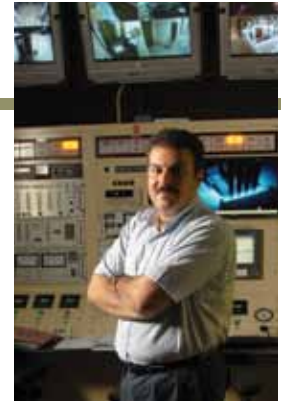


Infrastructure

The U.S. Department of Energy recognizes that in order for universities to conduct cutting-edge research and educate the next generation of nuclear scientists and engineers, they need the best equipment and infrastructure possible.

The Department funds three types of infrastructure grants through NEUP – general scientific infrastructure support, minor reactor upgrades, and major reactor upgrades.

The maximum amount awarded for a general scientific equipment grant is \$300,000. Universities can receive up to \$1.5 million for a major research reactor upgrade and up to \$200,000 for a minor upgrade.



Dr. Ayman Hawari
North Carolina
State University
R&D recipient



Madicken Munk
Oregon State University
Scholarship recipient

Scholarships

One of the U.S. Department of Energy's primary objectives for NEUP is to bolster the number of students earning degrees in nuclear science and engineering and related fields.

To accomplish that, NEUP awards dozens of scholarships to undergraduate students each year. Scholarship recipients receive \$5,000.

In order for students to be considered for a scholarship, they must be:

- A U.S. citizen
- At least a freshman when applying

- Attending an NEUP-accepted college or university
- Earning a bachelor's degree in nuclear-energy related disciplines such as materials or mechanical engineering, radiochemistry, and health physics.

Applicants are required to provide:

- College transcripts
- A personal statement describing their career goals
- Two letters of reference
- ACT/SAT scores.





Fellowships

NEUP awards graduate fellowships each year as part of its commitment to educate the next generation of nuclear scientists and engineers.

Fellowship recipients can receive up to \$150,000 over three years to help pay for their graduate studies and research.

In order for students to be considered for a fellowship, they must be:

- A U.S. citizen
- Attend an NEUP-accepted college or university
- Earning a master's or doctoral degree in nuclear-energy

related disciplines such as nuclear, materials or mechanical engineering, radiochemistry, and health physics.

Applicants are required to provide:

- College transcripts
- A personal career statement describing their career goals
- An essay outlining previous research
- An essay describing proposed graduate research
- Three letters of reference
- GRE scores.



Shadi Ghrayeb
Pennsylvania State University
Fellowship recipient



Students applying for a NEUP scholarship or fellowship must attend an NEUP-approved university or college.

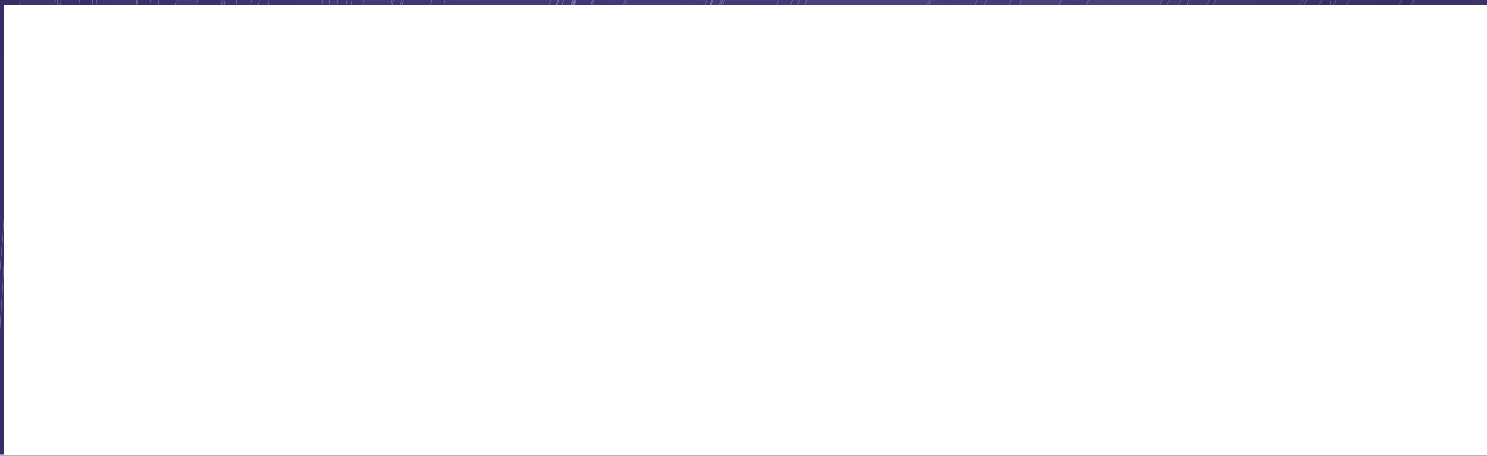
A current list of approved schools can be found on the NEUP Website.

Students from other universities can apply if the school is interested in pursuing affiliation with the government.

In order for such universities or colleges to administer NEUP funds, they must apply to the year-round funding opportunity announcement found on www.grants.gov. This solicitation is managed by the Department of Energy's Idaho field office.

For more information, visit www.ne-up.org.

Don't
Forget





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